CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO.92-067

WATER RECLAMATION REQUIREMENTS FOR:

SONOMA VALLEY COUNTY SANITATION DISTRICT, MITCHELL MULAS, BUENA VISTA WINERY, HELEN LARSON, DOMAINE CHANDON, AND DALE A. RICCI
SONOMA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter called the Board, finds that:

1. Sonoma Valley County Sanitation District (hereinafter referred to as the Producer) operates a secondary wastewater treatment plant located in the city of Sonoma in Sonoma County. The treatment plant is an extended aeration activated sludge system designed for handling an average dry weather flow of 3.0 MGD and a peak wet weather flow of 10.5 MGD. The plant provides secondary treatment of combined domestic and industrial wastewater from the City of Sonoma and adjacent unincorporated areas.

2. During the wet weather period of November 1 through April 30, treated, disinfected wastewater is allowed to be discharged to Schell Slough. This discharge to Schell Slough is presently governed by Waste Discharge Requirements in Order No. 92-063, adopted by the Board on June 17, 1992, which also serves as a permit under the National Pollutant Discharge Elimination System (NPDES No. CA0037800. Plant effluent has, until May, 1992, been discharged year round into Schell Slough.

3. During the dry weather period of May 1 through october 31, discharge to Schell Slough is prohibited, and wastewater is reused for irrigation of vineyards, pasture, and fodder crops.

4. Discharge to land is presently governed by Water Reclamation Requirements in order No. 87-030, adopted by the Board on April 15, 1987. order No. 87-030 allows for use of recycled water on land owned by Mitchell Mulas for irrigation of fodder, fiber, and seed crops, and pasture for use by grazing animals. Update of these requirements allows for reuse of water on the land of four additional users: Buena Vista Winery, Helen Larson, Domaine chandon, Inc., and Dale Ricci.

5. Mitchell Mulas, Buena Vista Winery, Helen Larson, Domaine Chandon, Inc., and Dale Ricci are hereinafter collectively referred to as the Users. Treated secondary effluent from the Sonoma Valley County Sanitation District is hereinafter referred to as recycled water.

6. Mitchell Mulas, Buena vista Winery, Helen Larson, Domaine Chandon, Inc, and Dale Ricci will be using recycled water during the dry weather season for irrigation of vineyards. Mitchell Mulas will also be using recycled water for irrigation of fodder crops, silage, and pasture for non-milking animals. The operation of each User is outlined below, along with estimated recycled water use volumes:

a. Buena Vista Winery - Approximately 1,000 acres of vineyard located immediately northeast of the Southern Pacific railroad line, about 2.8 miles southeast of the treatment plant. Buena Vista Winery will use approximately 24.4 million gallons per year (MG/Yr).

b. Domaine Chandon, Inc. - Approximately 750 acres of vineyard located adjacent to the Southern Pacific railroad line, about 3.4 miles southeast of the treatment plant. Domain Chandon will use approximately 117.3 MG/Yr during 1992, and approximately 149.9 MG/Yr by the year 1997.

c. Mitchell Mulas - Approximately 400 total acres of fodder crop land and vineyard located 3/4 miles south by southeast and 1.8 miles east by southeast of the treatment plant, respectively. Mitchell Mulas will use approximately 65.8 MG/Yr.

d. Dale Ricci - Approximately 60 acres of vineyard located about 2.2 miles east by southeast of the treatment plant. Dale Ricci will use approximately 24.4 MG/Yr during 1992, and approximately 39.8 MG/Yr by the year 2000.

e. Helen Larson - Approximately 26 acres of vineyard located southwest of the Southern Pacific Railroad line near Millerick Lane. Helen Larson will use approximately 1.3 MG/Yr.

The location and sizes of the areas to be irrigated are Also shown on Attachment A, which is hereby made a part of this Order.

7. An Overland Flow Facility was constructed as part of this project to provide for denitrification of the water prior to use for irrigation of vineyards. The Overland Flow Facility is located to the southwest of Ramal Road, northwesterly of reservoirs R-1 and R-2 (utilized for storage of recycled water). Effluent from the Sonoma Valley County Sanitation District treatment plant is applied over the upper reaches of approximately twenty four acres of sloped land, and allowed to flow across the vegetated surface to runoff collection ditches. The Overland Flow Facility and reservoirs are located just to the south of Ramal Road, in the vicinity of Hudeman Slough, as shown on Attachment A of this Order.

8. After treatment at the Overland Flow Facility, the water is directed to reservoirs used to store water during the dry weather months for vineyard irrigation. Three reservoirs are used for storage of vineyard irrigation water: Carneros No. 1, Carneros No. 83, and Reservoir R-3. These reservoirs are shown on Attachment A of this Order.

9. Water used for fodder crop, silage, and pasture irrigation by Mitchell Mulas does not require treatment at the Overland Flow Facility.

10. The Overland Flow Facility and a portion of Reservoir R-2 were constructed within the jurisdiction of Section 404 of the Clean Water Act, which regulates the discharge of fill material into waters of the United States. Sonoma County received a permit from the United States Army Corps of Engineers in May, 1990 for construction of these facilities. The mitigation project for loss of wetlands under the Corp of Engineers permit involved the construction of eleven shallow ponds created in the gently

sloping hillside above the five foot contour in the vicinity of the storage reservoirs. The combined maximum surface area of the ponds is approximately 14.3 acres. Their combined maximum volume is approximately 15 to 20 acre feet. Water supply for these ponds will be from the storage reservoirs, or directly from the treatment plant. These mitigation ponds are managed by Sonoma County.

11. The area surrounding the southern sides of Reservoirs R-1 and R-2 is predominantly seasonal fresh water wetlands (behind levees along Hudeman Slough); however, there is also an existing salt marsh, and a salt marsh restoration area located approximately 1,000 feet to the south of R-1.

12. A fresh water wetland enhancement project has been included as part of the design for reuse of treated effluent from the Sonoma Valley County Sanitation District. The wetlands enhancement involves the discharge of treated secondary effluent to existing, seasonal fresh water wetland areas located adjacent to Reservoirs R-1 and R-2, the Overland Flow Facility, and Hudeman Slough. Discharge of treated wastewater to the wetland areas for enhancement is authorized under an NPDES permit issued to the Sonoma Valley County Sanitation District on June 17, 1992, Order No. 92-063 (NPDES Permit No. CA0037800).

13. The Producer has proposed to discharge treated effluent from storage Reservoirs R-1 and R-2 that was not used during the dry weather season for irrigation, to Hudeman Slough at the beginning of the wet weather season. This discharge is authorized under specified conditions, under Order No. 92-063, adopted by the Board on June 17, 1992. Discharge to Hudeman Slough is only allowed in accordance with the requirements of Order No. 92-063.

14. The Producer, the Sonoma Valley County Sanitation District is responsible for the operation and maintenance of the treatment plant, major transmission facilities (pump stations, pipes, etc.), Reservoirs R-1, R-2, and R-3, and ensuring that recycled water distributed to the use areas is of acceptable quality in compliance with this Order. The Users, Mitchell Mulas, Buena Vista Winery, Helen Larson, Domaine Chandon, Inc., and Dale Ricci are responsible for ensuring compliance with this Order for all recycled water operations and facilities under the User's control, including any storage ponds utilized for recycled water other than Reservoirs R-1, R-2, and R-3.

15. Hudeman Slough and the proposed wetland enhancement areas are tributary to Sonoma Creek by way of Third Napa Slough and Second Napa Slough.

16. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986. The goals to be used in regulating water quality as set forth in the Basin Plan include maximum feasible reclamation or reuse of municipal, industrial and agricultural wastewaters. The Basin Plan also identifies beneficial uses of surface and ground waters in the region to be protected.

17. The beneficial uses identified in the Basin Plan for Sonoma Creek in the vicinity of this project include:

    a. Water Contact Recreation
    b. Non-contact Water Recreation
    c. Warm Fresh Water Habitat
    d. Cold Fresh Water Habitat
    e. Wildlife Habitat
    f. Preservation of Rare and Endangered Species
    g. Fish Migration
    h. Fish Spawning

18. The beneficial uses identified in the Basin Plan for groundwaters in the Sonoma Valley region include:

    a. Municipal Supply
    b. Agricultural Supply
    c. Industrial Supply
    d. Industrial Process Water Supply

19. Section 13523 of the California Water Code provides that a Regional Board, after consultation with and reception of recommendations from Department of Health Services (DOHS), and if it determines such action to be necessary to protect the public health, safety, or welfare, shall prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water.

20. The use of recycled water by the agricultural Users named above, for the purposes specified in Finding __ could affect the public health, safety, or welfare; requirements for those uses are therefore necessary in accordance with Section 13523 of the water code.

21. These recycled water requirements are in conformance with the statewide reclamation criteria established by DOHS as prescribed in Title 22, Sections 60031-60335, California Administrative Code.

22. This action is being taken by the Board for the protection of natural resources, and involves no significant effect on the environment, and is thus categorically exempt from the provisions of the California Environmental Quality Act in accordance with Title 14, California Administrative Code, Chapter 3, Section 15307.

23. An Environmental Impact Report (EIR) was completed for the project in April, 1981, in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.). A Final Subsequent EIR was completed in 1986. The Sonoma County Board of Directors adopted the Final Subsequent EIR on July 28, 1986 (Resolution 86-1537). For those aspects of the project that are authorized under this Order, compliance with the requirements of this Order will ensure mitigation of any potential adverse impacts noted in the EIR.

24. The Board has notified the Sonoma Valley County Sanitation District, Mitchell Mulas, Buena Vista Winery, Helen Larson, Domaine Chandon, Dale Ricci, and other interested agencies and persons of its intent to prescribe water reclamation requirements, and has provided them with an

opportunity for a public hearing and an opportunity to submit written views and recommendations.

25. The Board, in a public meeting, heard and considered all comments pertaining to the proposed recycled water project.

IT IS HEREBY ORDERED, that the Sonoma Valley County Sanitation District, Mitchell Mulas, Buena Vista Winery, Helen Larson, Domaine Chandon, and Dale Ricci, pursuant to the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Prohibitions

1. The treatment, storage, distribution, or reuse of recycled water shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

2. There shall be no bypass or overflow of untreated or partially treated wastewater to waters of the State from the Discharger's collection, treatment, storage or disposal facilities.

3. The discharge of toxic substances into ponds used for storage of recycled water which will disturb the normal biological mechanisms of the ponds is prohibited.

4. Milking animals are prohibited in recycled water use areas during irrigation.

5. Application of recycled water in, on or over any flowing surface waters, public roadways, houses, barns or wells is prohibited.

B. Recycled Water Use Specifications

Producer - Sonoma Valley County Sanitation District

1. The Sonoma Valley County Sanitation District shall assure that the recycled water is at all times an adequately treated, oxidized disinfected water which meets the following quality limits prior to being distributed or applied to the recycled water use areas:

In any grab or composite sample:

a) BOD, 5-day, 20°C	30 mg/l, monthly average maximum 40 mg/l, daily maximum
b) Suspended Solids	30 mg/l, monthly average maximum 40 mg/l, daily maximum

In any grab sample:

c) Dissolved Oxygen	1.0 mg/l, minimum
d) Dissolved Sulfides	0.1 mg/l, maximum

e) At any point downstream of the disinfection facilities where adequate contact with the disinfectant is assured:

The median number of total coliform organisms shall not exceed 23 MPN/100 ml as determined from the bacteriological results of the last seven days for which analyses have been completed; and, the number of total coliform organisms shall not exceed 240 MPN/100 ml in any two consecutive samples.

2. The Sonoma Valley County Sanitation District shall discontinue the distribution of recycled water to use areas during any period which they have reason to believe that the limits specified in B.1 are not being met. The distribution of recycled water shall not be resumed until all conditions which caused the limits specified in B.1 above to be violated have been corrected.

Users - Mitchell Mulas, Buena Vista Winery, Helen Larson, Domaine Chandon, Inc., and Dale Ricci

3. The User is responsible for ensuring compliance with the requirements of this Order for all recycled water operations and facilities under the User's control. The User's recycled water facilities shall be operated, maintained and repaired in accord with the conditions of this Order, in order to prevent public health hazards, pollution or nuisance conditions. A User Supervisor responsible for ensuring compliance with this Order should be appointed at each recycled water use area.

4. The User shall manage recycled water uses so as to prevent ponding or saturated conditions which could provide breeding conditions for mosquitoes or other vectors of public health significance, and to prevent odors or nuisance conditions.

5. The User shall provide adequate means of notification to inform any persons that may enter the recycled water use area that recycled water is being used. Conspicuous warning signs shall be posted at adequate intervals around the recycled water use areas and any storage ponds informing the public that the water is not safe for drinking or contact. Signs shall be of sufficient size and proper wording in order to be clearly read.

6. Recycled water shall not be allowed to escape from the authorized use areas by airborne spray or by surface flow except in minor amounts associated with good irrigation practices.

7. Recycled water shall not be applied to any use areas when soils are saturated to the extent that runoff or excessive ponding is likely to occur.

8. Recycled water shall not be sprayed on any walkways, passing vehicles, buildings, domestic water or food handling facilities, or areas not under the direct control of the user.

9. If a use restriction should be violated, the irrigation with recycled water shall be immediately terminated at the specific location, and

not resumed until all violations and conditions which would permit the violations to recur have been corrected.

10. Vineyard irrigation shall be suspended at least 10 days prior to harvesting, in order to allow the soils to dry and to prevent harvest workers from contacting recycled water.

11. Grapes which come into contact with recycled water shall be removed from the harvestable crop used for wine production.

12. Vineyard drip irrigation system emitters shall be installed close to the ground and in a way that minimizes the possibility of fruit being sprayed with recycled water if emitters become plugged, broken or removed. The drip irrigation lines and emitters shall be periodically inspected to ensure proper operation and compliance with this specification.

13. The Users shall prevent offsite runoff of recycled water.

14. The recycled water shall be filtered before use in the drip irrigation system.

Fodder Crop, Silage, and Pasture Irrigation

15. Fodder, fiber and seed crops shall not be harvested when wet from recycled water.

Storage Reservoirs and Ponds - Producer and Users

16. Water at the surface of any pond or reservoir containing recycled water shall meet the following quality limits at all times, in any grab sample:

a.	Dissolved Oxygen	2.0 mg/l, minimum
b.	Dissolved Sulfide	0.1 mg/l, maximum
c.	pH	6.0 minimum, 9.0 maximum

17. In order to prevent the threat of overflows, a minimum freeboard of two (2) feet shall be maintained at all times in any reservoir or pond containing wastewater or recycled water, except during extreme rainfall events, or with prior written authorization by the Board's Executive Officer.

18. All reservoirs and ponds shall be adequately protected from erosion, washout and flooding from a rainfall event having a predicted frequency of once in 100 years.

General - Producer and Users

19. Use of recycled water under the provisions of this Order shall be limited to vineyard drip irrigation, spray irrigation of fodder, fiber and seed crops, and pasturing of non-milking animals.

20. The use of recycled water shall not cause the degradation of groundwater used for domestic purposes or cause any change in a

quality parameter which would make the groundwater unsuitable for irrigation use.

21. There shall be no irrigation or impoundment of recycled water within 100 feet of any well used for domestic water supply, unless it can be demonstrated to the Executive Officer's satisfaction that special circumstances justify lesser distances to be acceptable.

22. All drinking water facilities and domestic water supply well heads within 500 feet of any recycled water use area shall be protected from direct or wind-blown recycled water spray that may result from spray or sprinkler irrigation.

23. All domestic (potable) water service connections to recycled water use areas shall be equipped with an air-gap separation. A Reduced Pressure Principle Backflow Device may be provided in lieu of an air-gap separation, if approved by the California State Department of Health Services and the water supplier.

24. There shall be at least a ten-foot horizontal and a one-foot vertical separation between all pipelines transporting recycled water and those transporting domestic supply water, with domestic water pipelines above recycled water pipelines.

25. All equipment, including pumps, piping, valves, etc. with public access which may at any time contain recycled water shall be adequately and clearly identified with warning signs and the Producer and Users shall make all necessary provisions, in addition, to inform the public that the liquid contained is recycled water which is unfit for human consumption.

26. The Producer and Users shall maintain in good working order and operate, as efficiently as possible, any facility, equipment or control system installed, or as modified, to achieve compliance with this Order.

27. The Producer and Users should provide inspections of use areas, and supervision and training for User staff in order to assure proper operation of the recycled water facilities and to provide proper worker protection. Records of inspections and trainings should be maintained by the Discharger.

28. Use of recycled water for application to the land is allowed during the period from November 1 through April 30, providing that there has been little or no rainfall during the weeks prior to use.

C. Provisions

1. The Producer shall submit a Project Management Plant, acceptable to the Executive Officer, by October 1, 1992, which provides a detailed description of the recycled water use project. This report shall include, at a minimum, the following information (the Users shall provide all necessary information to the Producer for this report as appropriate):

a. A description of the water flow regime from the wastewater treatment plant to the various Users. A description of the flow quantities directed to the overland Flow Facility, and those directed to the reservoirs or Users without treatment at the overland Flow Facility shall be provided. A visual flow chart shall also be provided;

b. A detailed management plan for the recycled water project;

c. Provisions for prevention of groundwater degradation through application of recycled water at rates that are appropriate for plant uptake (overwatering should be prevented).

2. The Producer shall submit, by October 1, 1992 a management plan for operation and maintenance of the eleven wetland mitigation ponds.

3. The Producer shall submit a report, by August 1, 1992, which provides a detailed description and management plan for the overland Flow Facility treatment process, including amount of cheese whey used, and quality of the effluent (constituents to include dissolved oxygen, BOD, total coliform bacteria). A second report shall be submitted by November 1, 1992 which provides any additional operation and maintenance details that are developed after the first operating season during the summer of 1992.

4. The Users that utilize recycled water for irrigation of vineyards shall submit, by October 1, 1992, an irrigation management plan which includes the following:

   a. A plan to prevent harvest of grapes that accidentally come in contact with the recycled water.

   b. Routine monitoring program that will provide data on observed leaks and breaks (when, where, how long, description of area exposed) and operating characteristics of the system such as pressure in drip lines, areas irrigated, etc.

   c. Training and education program for field workers that adequately educates the worker about the potential public health impacts involved in contact with the recycled water, and of the requirements preventing the harvesting of grapes that have come in contact with the wastewater.

5. The Producer and User shall comply with all applicable sections of this Order immediately upon adoption by the Board.

6. The Producer and User shall comply with the Self Monitoring Program as adopted by the Board and as may be amended by the Board's Executive officer.

7. The use of recycled water under this Order shall be limited to the Users and uses identified in Findings 4 through 6 of this order, and additional Users and uses for which written authorization has been obtained by the Producer from the Board's Executive officer.

8. Sufficient irrigation and storage shall be provided so that all the Producer's recycled water will be contained without discharge to State waters from May 1 to October 31 of each year. The amount of water stored shall be minimized, and the amount reused for irrigation shall be maximized.

9. The Producer shall develop a contingency plan outlining the actions to be taken by the Producer and/or Users in the event effluent quality fails to meet the requirements of this Order. A copy of this plan shall be submitted to the Board within 120 days of adoption of this Order. Each year, prior to the irrigation season, this plan shall be reviewed and, as necessary, updated. Any revisions shall be submitted to the Board.

10. In the event that either the Producer or User is unable to comply with any of the conditions of this Order due to:

    a. Breakdown of transmission or treatment equipment;
    b. Accidents caused by human error or negligence; or
    c. Other causes such as acts of nature,

    the Producer or User (or agents) shall notify the Board by telephone as soon as they have knowledge of the incident. Written notification of such incidents shall be submitted by the Producer within two weeks of the incident, unless directed otherwise by Board staff. Written notice shall include pertinent information explaining the reasons for the non-compliance, and what steps were taken or are planned in order to correct the problem and prevent the problem from recurring.

11. The Producer or User shall permit the Board or its authorized representatives, in accordance with California Water Code Section 13267 (c):

    a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
    b. Inspection at reasonable times of any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order;
    c. Access to and copy of, at reasonable times, any records that must be kept under the conditions of this Order; and
    d. To photograph, sample and monitor at reasonable times, for the purpose of assuring compliance with this Order.

12. In the event of any change in control or ownership of land or water recycle facilities governed by this Order, the Producer shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this Board.

13. This Order is subject to review and updating by the Board, as necessary to comply with changing State and Federal laws, regulations, policies, or guidelines; changes in the Board's Basin Plan; or changes in the discharge characteristics. This Order will be reviewed to determine the need for updating no more than five years from the date of adoption.

14. After notice and opportunity for a hearing, this Order may be terminated or modified for cause including, but not limited to:

    a. Violation of any term or condition of this Order;
    b. Obtaining the Order by misrepresentation, or failure to disclose fully all relevant facts;
    c. A change in any condition that requires either a temporary or permanent change in the authorized reuse; or,
    d. Endangerment to public health or environment that can only be regulated to acceptable levels by modification or termination of this Order.

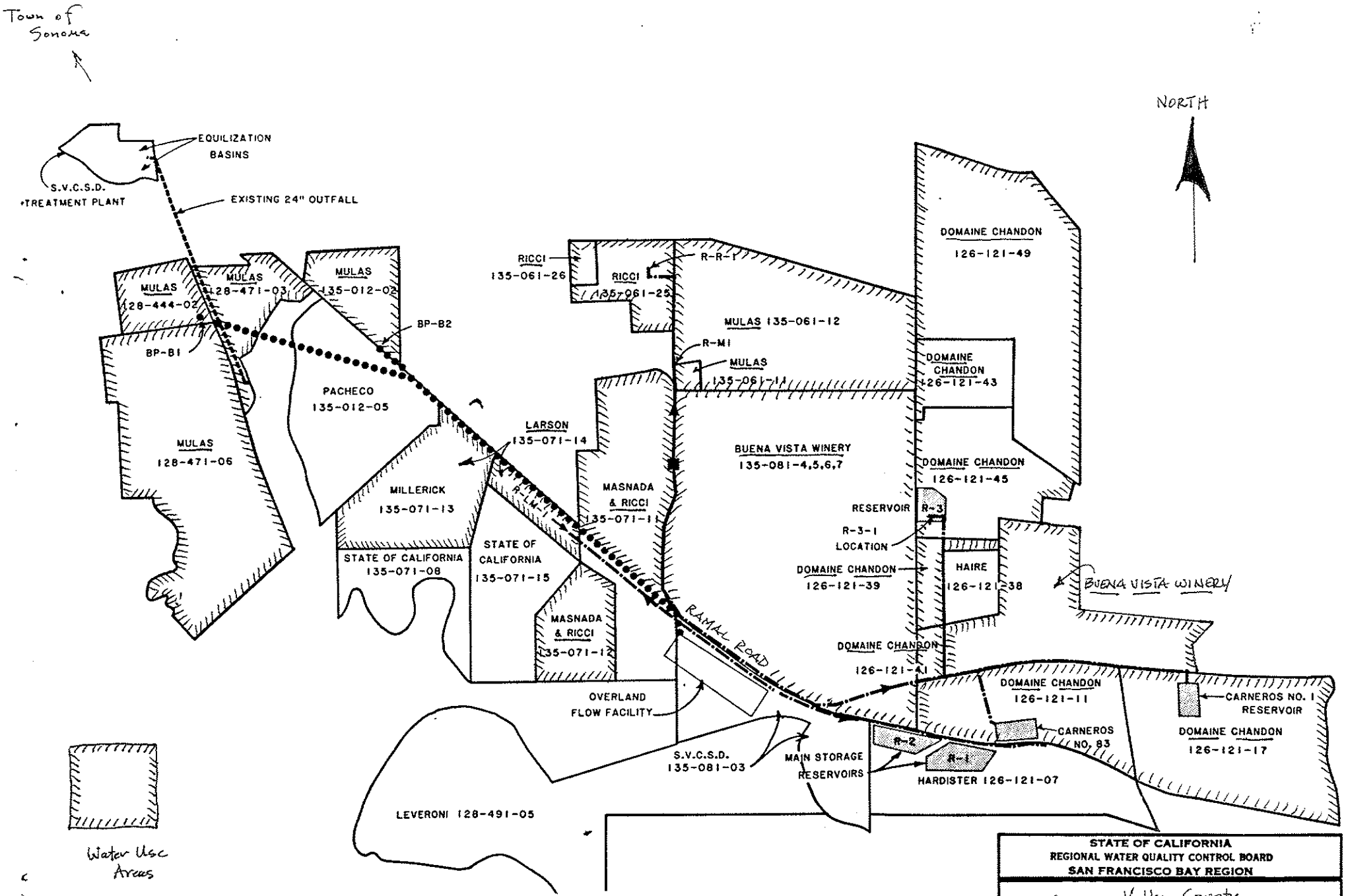
15. The recycled water requirements prescribed by this Order supersede the requirements prescribed by Order No. 87-030. Order No. 87-030 is hereby rescinded.

I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on June 17, 1992.

STEVEN R. RITCHIE
Executive Officer

Attachments:

A. Location Maps: Recycled Water Use Areas
   Self-Monitoring Program



STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

Sonoma Valley County Sanitation District Reclamation Project

ATTACHMENT A

DRAWN BY: KRH	DATE: 6-9-92	DRWG NO.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

SONOMA VALLEY COUNTY SANITATION DISTRICT

MITCHELL MULAS, BUENA VISTA WINERY

DOMAINE CHANDON, INC, HELEN LARSON, AND DALE RICCI

RECYCLED WATER PROJECT

IN SONOMA COUNTY

ORDER NO. 92-067

SELF-MONITORING PROGRAM

SONOMA VALLEY COUNTY SANITATION DISTRICT AND RECYCLED WATER USERS
SONOMA VALLEY COUNTY SANITATION DISTRICT RECYCLED WATER PROJECT

I. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principle purposes of a monitoring program by a waste discharger or recycled water producer or user, also referred to as a self-monitoring program, are:

A. To document compliance with waste discharge requirements and prohibitions established by this Regional Board; and

B. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge or water reclamation.

II. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to Code of Federal Regulations Title 40, Section 136 (40 CFR S136), or other methods approved and specified by the Executive Officer of this Regional Board.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health Services (DOHS), or a laboratory waived by the Executive Officer from obtaining a DOHS certification for these analyses.

The director of the laboratory whose name appears on the certification, or his/her laboratory supervisor who is directly responsible for the analytical work performed shall supervize all analytical work including appropriate quality assurance/quality control procedures in his/her laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

III. DEFINITION OF TERMS

A. SAMPLES

1. A grab sample is an individual sample collected in a short period of time not exceeding 15 minutes. Grab samples are used primarily in determining compliance with daily maximum or instantaneous maximum limits. Grab samples represent only conditions existant at the time of sample collection.

2. A flow sample is the accurate measurement of the average flow volume over a given period of time, using a properly calibrated and maintained flow measuring device.

3. A composite sample is a sample composed of individual grab samples taken from a single sampling location, mixed in proportions to the instantaneous rate of waste flow corresponding to each grab sample (with proportions varying by not more than plus or minus five percent from the instantaneous rate), and collected at regular intervals not greater than one hour, or collected by the use of continuous automatic sampling devices capable of attaining the proportional accuracy stipulated above throughout the sampling period (eg 24 hours).

4. Freeboard is the vertical distance between the water surface and the lowest elevation of the top of the water containment structure (perimeter dike, levee, berm, etc.).

B. STANDARD OBSERVATIONS

1. Recycled Water Use Areas

(a) Evidence of recycled water escaping the recycled water use area through surface runoff or airborne spray (Show affected area on a sketch).

(b) Odor from use area: If present, indicate apparent source, charcterization, direction of travel, and any public use area or off-site facility affected.

(c) Evidence of prolonged ponding of recycled water, or of mosquitoes breeding within the use area due to ponding.

(d) Warning signs properly posted to inform public that water being used is recycled water which is not safe for drinking.

(e) Evidence of recycled water sprayed on vehicles, buildings, domestic water facilities, food handling facilities, or surface waterways.

2. Recycled Water Storage Pond Areas

(a) For each reservoir or storage pond, determine height of the freeboard at the lowest point of the perimeter levee.
(b) Evidence of seepage from the reservoir or pond (Show affected area on a sketch, and estimate volume lost.)
(c) Odor from reservoir or pond: If present, indicate apparent source, charcterization, direction of travel, and any public use area or off-site facility affected.
(d) Warning signs properly posted to inform public that pond contains wastewater which is not safe for drinking.

3. Overflows and Bypasses

(a) Location of overflow or bypass, and description of any surface water or land area affected (show on map or sketch of area).

(b) Date and time when overflow or bypass started, and when overflow or bypass ceased.

(c) Estimated total volume discharged, or flow rate and duration of event.

(d) Explanation of cause, and corrective actions taken.

IV. DESCRIPTION OF SAMPLING AND OBSERVATION STATIONS

NOTE: A sketch showing locations of all stations described below shall accompany the first monitoring report, and subsequent reports when locations are changed or a violation is reported.

A. RECYCLED WATER TREATMENT, STORAGE AND DISTRIBUTION FACILITIES (PRODUCER)

Station	Description

1. TREATMENT PLANT EFFLUENT

E-1	Located at any point in the effluent from the Sonoma Valley County Sanitation District treatment plant where all waste tributary to the effluent is present, prior to being distributed to users. (NOTE: May be the same as E-1-D)
E-1-D	Located at any point in the effluent from the treatment plant disinfection facilities at which point adequate contact with the disinfectant is assured.

2. RECYCLED WATER STORAGE RESERVOIR EFFLUENT

RSE	Located at any point in the effluent from the reclaimed water storage reservoir.

3. RECYCLED WATER STORAGE RESERVOIR PERIMETER

RS - 1 through RS - 8	Located at the corners and mid-points of the perimeter levees of the recycled water storage reservoirs designated as R-1, R-2, R-3, Carneros No. 1, and Carneros No. 83.

4. RECYCLED WATER DISTRIBUTION SYSTEM

RD - 1 through RD - 'n'	Located at a point in the distribution system for each recycled water use area, suitable for measuring the total flow of recycled water distributed to the use area.

B. RECYCLED WATER USE AREAS (USERS)

Station	Description

1. USE AREA PERIMETER

U - 1 through U - 'n'	Points located at about 1000 foot intervals around the perimeter of each recycled water use area.

2. USE AREA STORAGE POND WATER

UPW	In each storage pond, within one foot of the water surface, and no less than two feet from the bank, representative of the pond water.

3. USE AREA STORAGE POND PERIMETER

UP - 1 through UP - 4	Points located at the mid-points of the perimeter levees around each storage pond.

C. OVERFLOWS AND BYPASSES (PRODUCER AND USERS)

OV - 'n'	Any point in the treatment, storage or distribution facilities, or use areas where an overflow or bypass occurs (eg manholes, pipes, valves, pumps, etc.).

V. SCHEDULE OF SAMPLING, MEASUREMENTS, AND ANALYSES

A. The Producer and/or Users of the recycled water are required to perform observations, sampling, measurements and analyses according to the schedule given in Table 1 and Table 1 Footnotes (Attachment A).

B. This Self-Monitoring Program is applicable during any period when recycled water is distributed to the recycled water storage reservoir or to any use area storage pond, or used at any recycled water use area.

VI. REPORTS TO BE FILED WITH THE REGIONAL BOARD

A. Self-Monitoring Reports

Written reports shall be filed regularly for each calendar month during any month when recycled water is produced, distributed or used. Reports shall be submitted to this Regional Board's office no later than the fifteenth day of the following month, and shall include the following:

1. Letter of Transmittal

The letter of transmittal shall include the following:
- o The Discharger's name, address, phone number and contact person(s);
- o The monitoring period being reported, by month and year;
- o The name of the responsible Regional Board staff member;

- o Discussion of all requirement violations found during the monitoring period, including the causes of the violations and corrective actions taken or planned in order to prevent future violations (References to reports previously submitted describing corrective actions and/or implementation schedules are acceptable.); and
- o When applicable, discussion of any special or unusual events pertinent to maintaining compliance with waste discharge requirements, such as failure, repair, replacement or installation of major equipment, or significant operational changes or improvements.

The transmittal letter shall contain a statement by the Discharger, or the Discharger's authorized agent, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate and complete.

2. Results of Analyses and Observations

Tabulations of the results from all required analyses and observations specified in Table 1 and Table 1 Footnotes (Attachment A) by date, time, type of sample or observation, and sample or observation station. Copies of Recycled Water User's Reports (Attachment B), and where applicable, Recycled Water Storage Pond Reports (Attachment C), or a comprehensive summary of the observations, must be included.

B. Report of Permit Violation

In the event the Discharger violates, or threatens to violate the conditions of the waste discharge requirements and prohibitions due to:

1. Maintenance work, power failure, or breakdown of wastewater transport or treatment equipment;

2. Accidents caused by human error or negligence; or

3. Other causes such as acts of nature,

the Discharger shall notify the Regional Board office by telephone as soon as the Discharger or the Discharger's agents have knowledge of the incident. A written report shall be submitted within two weeks of the noncompliance event, unless directed otherwise by Regional Board staff. The written report shall include a description of the event, results of any sampling conducted during the event, an explanation of the reasons for noncompliance, actions taken to correct the problem and the dates thereof, and actions being taken to prevent the problem from recurring.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in the Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 92-067.

2. Is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer.

STEVEN R. RITCHIE
Executive Officer

Effective Date 6/17/92

Attachments:
A. Table 1 - Schedule for Sampling, Measurements and Analyses; and Table 1 Footnotes
B. Reclaimed Water User's Report
C. Reclaimed Water Storage Pond Report

TABLE 1

SCHEDULE FOR SAMPLING, MEASUREMENTS AND ANALYSES (1)

(SONOMA VALLEY COUNTY SANITATION DISTRICT WASTEWATER RECLAMATION PROJECT)

SAMPLING STATIONS -->	Foot note	E-1		E-1-D	RSE	All RD	UPW	All RS,U & UP	All OV
Type of Sample -->		Flow	G	G	Flow	Flow	G	O	O
Parameter (units)		C-24			G				
Flow Rate (MGD or gpd)	(2)	Cont			Cont	Cont			E
Flow Volume (gallons)	(2)	M			M	M			E
BOD, 5-day (mg/l)		3/W							
Total Suspended Solids (mg/l)		3/W							
Oil and Grease (mg/l)	(3)		M						
Chlorine Residual and Dosage (mg/l) & (kg/d)	(5)			Cont					
pH (units)			2W		M		M		
Dissolved Oxygen (mg/l)			2W		M		M		
Dissolved Sulfide(mg/l)	(6)		2W		M		M		
Total Coliform (MPN/100 ml)				D					
Ammonia Nitrogen (mg/l)		M							
Nitrate Nitrogen (mg/l)		M							
Total Organic N (mg/l)		M							
Total Phosphate (mg/l)		M							
All Applicable Standard Observations	(7)				W			W	E

LEGEND:

Type of Sample
- Flow = Flow measurement
- C-24 = 24-hour composite
- G = Grab sample
- O = Observations

Sampling Frequency
- Cont = Continuous
- M = Monthly
- W = Weekly
- 3/W = Three days per week
- D = Daily
- E = Each event
- 2W = Every two weeks

TABLE 1 FOOTNOTES

(1) This Self-Monitoring Program is applicable during any period when recycled water is distributed to the recycled water storage reservoir or to any use area storage pond, or used at any recycled water use area.

(2) Flow Rate and Volume: Continuous measurement. Report on a daily basis, flow rate in million gallons per day (MGD) or gallons per day (gpd). Report on a monthly basis, the total monthly flow in million gallons (MG) or gallons.

(3) Oil & Grease: Each sampling shall consist of three grab samples taken at equal intervals during the sampling day, with each grab sample being collected in separate glass containers and analyzed separately. Report results as the weighted average of the three values, with weighting based upon the instantaneous flow rates occurring at the time of each grab sample.

(4)(a) Chlorine Residual: Continuous monitoring. Report daily maximum and minimum concentrations (mg/l) after adequate contact time has been assured, along with the time of day the maximum and minimum occurred.

(b) Chlorine Dosage: Report on a daily basis, average concentration (mg/l), and total loading (kg/d).

(6) Dissolved Sulfides: Analysis required only when Dissolved Oxygen is less than 2.0 mg/l.

(7) Observations must be made while recycled water is being used. Users (or designated agent) shall conduct, at the frequency indicated in Table 1, the Standard Observations defined in Part III.B. of this Self-Monitoring Program.

Users (or designated agent) shall submit a Recycled Water User's Report (Attachment B) for each use area, and a Recycled Water Storage Pond Report (Attachment C) for each storage pond, to the Producer for each month when recycled water is used at, or distributed to, the use area. The Producer, in turn, shall submit copies, or a summary, of the User's reports to the Board as part of the monthly Self-Monitoring Report.

RECYCLED WATER USER'S REPORT

1. Name of User: _____
2. Reporting Period (Month/Year): _____

3. Circle dates when recycled water was used: 1 2 3 4 5 6 7 8 9 10

   11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

4. Total Monthly Flow used (gallons): _____
5. Required Standard Observations (As defined in SMP Part III.B.):
   [For each inspection, record date, time, and 'yes' or 'no' for each observation, according to observed conditions.]

Inspection Date and Time:					
Observation Stations Inspected:					
Escape of Recycled Water from Site					
Nuisance Odors from Recycled Water					
Prolonged Ponding of Recycled Water					
Mosquito Breeding					
Warning Signs Not Properly Posted					
Spray on Waterways, Vehicles, etc.					

If any of the above observations were yes, a written report containing the following information shall be submitted:

a. Show location of violation on a sketch of the site.
b. Explain cause and extent of violation.
c. Describe corrective actions taken, date(s) compliance was achieved, and date/time reclaimed water use resumed.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

_____ _____

Signature of User Supervisor Date

NOTE: For use areas with reclaimed water storage ponds, a Recycled Water Storage Pond Report (Attachment C) must also be completed for each pond.

RECYCLED WATER STORAGE POND REPORT

1. Name of User: _____
2. Reporting Period (Month/Year): _____
3. Total Monthly Flow into Pond (gallons): _____
4. Total Monthly Flow out of Pond (gallons): _____
5. Required Standard Observations (as defined in SMP Part III.B.):
   [For each inspection, record date, time, pond freeboard, and 'yes' or 'no' for other observations, for each Station (**).]

Inspection Date and Time: --->						
Freeboard (feet):						
	**					
Evidence of Seepage from Pond	UP-1					
	UP-2					
	UP-3					
	UP-4					
Nuisance Odors from Pond	UP-1					
	UP-2					
	UP-3					
	UP-4					
Warning Signs Not Properly Posted	UP-1					
	UP-2					
	UP-3					
	UP-4					

** = Observation Station Code

If any observations were yes, indicating a violation, a written report containing the following information shall be submitted:

a. Show location of violation on a sketch of the site.
b. Explain cause and extent of violation.
c. Describe corrective actions taken, date(s) compliance was achieved, and date/time regular pond use was resumed.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

_____ _____
Signature of User Supervisor Date